forming a layer of the viscous fluid on the first substrate by dosing the first substrate with viscous fluid from the dosing arm;

rotating the first substrate with a rotary drive;

positioning the second substrate onto the layer of viscous fluid formed on the first substrate with a connecting means;

spinning off excess viscous fluid of the layer between the first substrate and the second substrate with a rotary centrifugal drive; and

controlling a thickness of the layer formed on the first substrate to a predetermined thickness by controlling at least one of the dosing pump, a position of the dosing arm with respect to the first substrate, a rotary speed of the rotary drive, and a rotary speed of the rotary centrifugal drive in response to: (a) a temperature of the first substrate; (b) a temperature of the second substrate; and (c) at least one of a temperature of the viscous fluid and a viscosity of the viscous fluid.

31. (Previously presented) An apparatus for bonding a first planar substrate to a second planar substrate by a bonding material in the form of a viscous fluid, comprising:

a pump that pumps the viscous fluid;

a dosing arm, connected to the pump and positioned over the first substrate, that doses the first substrate with the viscous fluid and forms a layer of the viscous fluid on the first substrate;

a plate that supports the first substrate;

a rotary drive that rotates the plate;

a connecting means that positions the second substrate onto the layer of viscous fluid formed on the first substrate;

a rotary centrifugal drive that spins off excess viscous fluid of the layer between the first substrate and the second substrate; and

a controller that controls a thickness of the layer to a predetermined thickness by controlling at least one of the dosing pump, a position of the dosing arm, a rotary speed of the rotary drive, and a rotary speed of the rotary centrifugal drive in response to: (a) a temperature of the first substrate; (b) a temperature of the second substrate; and (c) at least one of a temperature of the viscous fluid and a viscosity of the viscous fluid.

32. (New) The method according to claim 30, further comprising:

measuring the thickness of the layer; and

automatically adjusting deviations between the measured thickness of the layer and the predetermined thickness to within at least one tolerance.

33. (New) The method according to claim 30, wherein the at least one tolerance includes a range in at least one of a radial direction of the first substrate and a tangential direction of the first substrate.

34. (New) The method according to claim 30, further comprising:

controlling the thickness of the layer of viscous fluid by controlling at least one of a connecting pressure of the connecting means and a rotary speed of the rotary centrifugal drive.

35. (New) A method of producing optical storage disks, comprising:

utilizing the method of clam 30.

36. (New) The apparatus according to claim 31, further comprising:

at least one sensor that measures the thickness of the layer, wherein the controller controls at least one of the dosing pump, the position of the dosing arm, the rotary speed of the rotary drive, and the rotary speed of the rotary centrifugal drive to automatically adjust deviations between the measured thickness of the layer and the predetermined thickness to within at least one tolerance.

37. (New) The apparatus according to claim 31, wherein the controller controls the thickness of the layer of viscous fluid by controlling at least one of a connecting pressure of the connecting means and a rotary speed of the rotary centrifugal drive.

38. (New) The apparatus according to claim 31, wherein the at least one tolerance includes a range in at least one of a radial direction of the first substrate and a tangential direction of the first substrate.